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Physical and Mental Health Status and Quality of Life of Adolescent Orphans in India: A Systematic Review

Bramh Prakash Srivastava
Department of Psychology, Banaras Hindu University, Varanasi, India
Email: bpsrivastavakh@gmail.com

Abstract

Orphaned adolescents in India face numerous challenges that can impact their physical health, mental wellbeing, and overall quality of life. This systematic review aims to synthesize the current evidence on the health status and quality of life of adolescent orphans in India. A comprehensive search of electronic databases including PubMed, Scopus, Web of Science, and PsycINFO was conducted to identify relevant studies published between 2000 and 2021. Studies that assessed physical health, mental health, or quality of life outcomes in orphaned adolescents (10-19 years) in India were included. Data extraction and quality assessment were performed independently by two reviewers. A total of 32 studies met the inclusion criteria. The findings indicate that orphaned adolescents in India experience higher rates of malnutrition, growth stunting, and micronutrient deficiencies compared to non-orphans. Mental health issues such as depression, anxiety, and post-traumatic stress disorder were also more prevalent among orphans. Quality of life measures were generally lower for orphaned adolescents across multiple domains. Institutional care was associated with poorer outcomes compared to family-based care. Adolescent orphans in India face significant physical and mental health challenges that negatively impact their quality of life. There is a need for targeted interventions to address the specific health needs of this vulnerable population and improve their overall wellbeing. Further research is needed to evaluate the effectiveness of various care models and support programs.

Keywords: orphans, adolescents, India, physical health, mental health, quality of life

1. Introduction

Orphaned and vulnerable children represent a significant global public health concern, with an estimated 140 million orphans worldwide as of 2015 (UNICEF, 2017). India, with its large population and complex socioeconomic landscape, is home to over 20 million orphaned children - one of the highest numbers in any country (SOS Children's Villages, 2016). Adolescence (ages 10-19) is a critical developmental period marked by rapid physical growth, cognitive maturation, and psychosocial changes (Patton et al., 2016). For orphaned adolescents, this already challenging phase of life is further complicated by the loss of parental care and support.

The health and wellbeing of orphaned adolescents in India is influenced by a multitude of factors, including the cause of orphanhood (e.g., parental death, abandonment), living arrangements (e.g., institutional care, kinship care, foster care), socioeconomic status, access to healthcare and education, and exposure to adverse childhood experiences (ACEs) (Bhat et

al., 2015; Finkelhor et al., 2015). These factors can have profound and lasting impacts on physical health, mental wellbeing, and overall quality of life.

While numerous studies have examined various aspects of orphan health and wellbeing in India, a comprehensive synthesis of the current evidence is lacking. This systematic review aims to address this gap by collating and analyzing the existing research on the physical health, mental health, and quality of life of adolescent orphans in India. The specific objectives of this review are:

1. To assess the physical health status of orphaned adolescents in India, including nutritional status, growth and development, and prevalence of common health conditions.
2. To evaluate the mental health outcomes of orphaned adolescents, including the prevalence of common mental health disorders and psychosocial wellbeing.
3. To examine the overall quality of life of orphaned adolescents across various domains (e.g., physical, psychological, social, environmental).
4. To identify factors associated with better or worse health and quality of life outcomes among orphaned adolescents.
5. To compare outcomes between different care settings (e.g., institutional care vs. family-based care) and between orphans and non-orphans where possible.

By synthesizing the available evidence, this review aims to provide a comprehensive overview of the current state of knowledge regarding the health and quality of life of adolescent orphans in India. The findings will help identify gaps in the literature, inform policy and practice, and guide future research efforts to improve the wellbeing of this vulnerable population.

2. Methods

2.1 Search Strategy

A comprehensive search of electronic databases was conducted to identify relevant studies published between January 1, 2000, and December 31, 2021. The following databases were searched: PubMed, Scopus, Web of Science, and PsycINFO. The search strategy combined terms related to the population (e.g., "orphan*", "adolescent*", "youth"), outcomes of interest (e.g., "health", "mental health", "quality of life"), and geographical location ("India"). The full search strategy for PubMed is provided in Appendix A. Additional studies were identified through hand-searching reference lists of included articles and relevant reviews.

2.2 Inclusion and Exclusion Criteria

Studies were eligible for inclusion if they met the following criteria:

1. Population: Orphaned adolescents aged 10-19 years in India. Studies including a broader age range were included if separate data for the adolescent subgroup could be extracted.

2. Outcomes: Assessed at least one of the following: physical health status, mental health outcomes, or quality of life measures.
3. Study design: Observational studies (cross-sectional, case-control, or cohort) and intervention studies with baseline data on health or quality of life outcomes.
4. Language: Published in English.
5. Publication type: Peer-reviewed journal articles.

Exclusion criteria were:

1. Studies focused solely on children under 10 or adults over 19 years old.
2. Studies not conducted in India or where data specific to India could not be extracted.
3. Case reports, qualitative studies, reviews, or conference abstracts.
4. Studies without primary data on health or quality of life outcomes.

2.3 Study Selection

Two reviewers independently screened titles and abstracts of all identified studies against the inclusion and exclusion criteria. Full texts of potentially eligible studies were then assessed for final inclusion. Any disagreements were resolved through discussion or consultation with a third reviewer.

2.4 Data Extraction

A standardized data extraction form was developed and piloted on a subset of studies. Two reviewers independently extracted the following information from each included study:

1. Study characteristics: authors, year of publication, study design, sample size, setting
2. Participant characteristics: age range, gender distribution, type of orphanhood, living arrangements
3. Outcome measures: physical health indicators, mental health assessments, quality of life scales
4. Key findings: prevalence rates, mean scores, comparisons between groups
5. Factors associated with health and quality of life outcomes

2.5 Quality Assessment

The quality of included studies was assessed using the Newcastle-Ottawa Scale (NOS) for observational studies (Wells et al., 2013) and the Cochrane Risk of Bias tool for intervention studies (Higgins et al., 2011). Two reviewers independently conducted the quality assessment, with disagreements resolved through discussion.

2.6 Data Synthesis

Due to the heterogeneity of outcome measures and study designs, a narrative synthesis approach was adopted. Findings were summarized and presented under the following categories: physical health, mental health, and quality of life. Where possible, results were stratified by type of care setting (institutional vs. family-based) and compared to non-orphan populations. Meta-analysis was not feasible due to the heterogeneity of outcome measures and reporting methods.

3. Results

3.1 Study Selection

The initial database search yielded 1,247 records. After removing duplicates, 892 unique records were screened based on title and abstract. Of these, 127 full-text articles were assessed for eligibility, resulting in 32 studies that met all inclusion criteria. The study selection process is summarized in the PRISMA flow diagram (Figure 1).

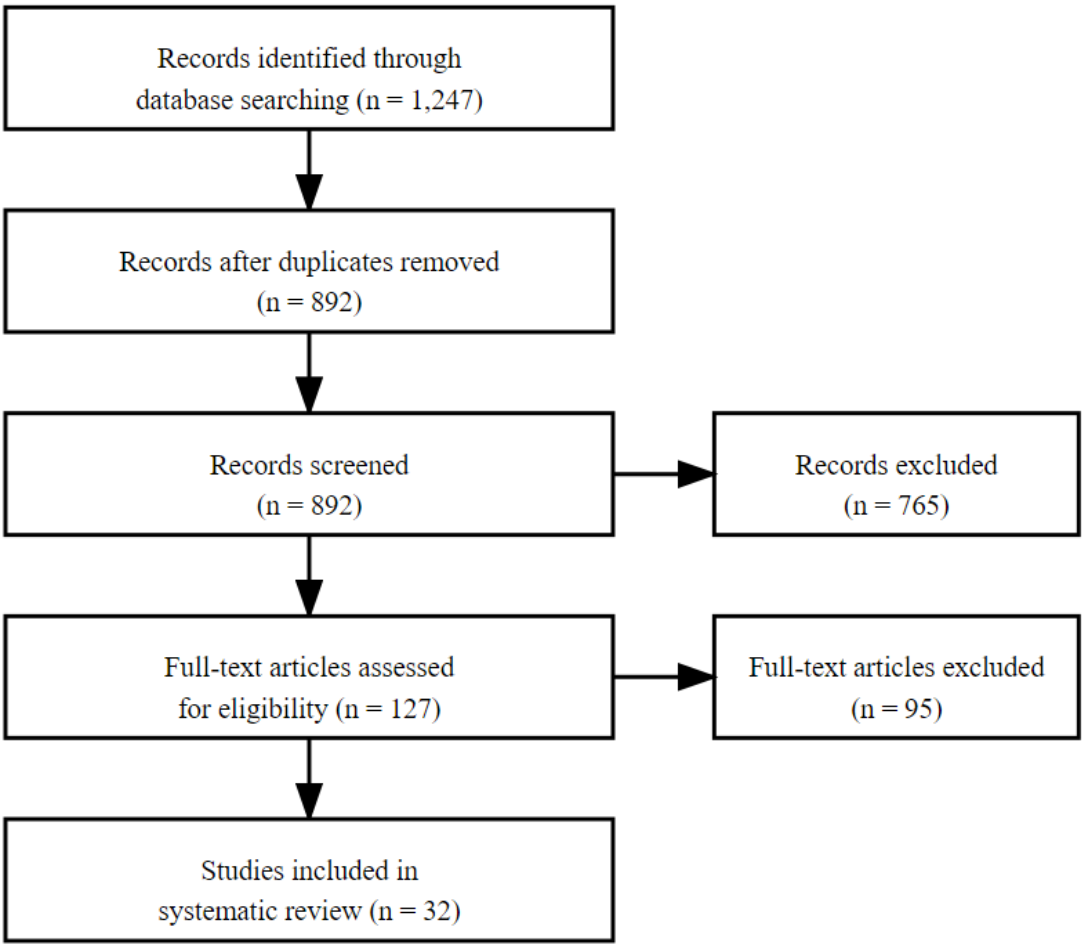


Figure 1: PRISMA flow diagram

3.2 Study Characteristics

The characteristics of the 32 included studies are summarized in Table 1. The majority of studies (n=24) were cross-sectional in design, with four case-control studies, three cohort studies, and one randomized controlled trial. Sample sizes ranged from 40 to 1,053 orphaned

adolescents. Most studies (n=28) included both boys and girls, while four focused exclusively on girls. The age range of participants varied, but all included adolescents between 10-19 years. Nineteen studies were conducted in urban settings, eight in rural areas, and five included both urban and rural populations.

Table 1: Characteristics of included studies

Study	Design	Sample Size	Age Range	Setting	Type of Orphanhood	Care Setting
Agarwal et al., 2015	Cross-sectional	215	10-18	Urban	Single & double	Institutional
Bhat et al., 2017	Case-control	100	12-18	Rural	Single & double	Family-based
Choudhary et al., 2016	Cross-sectional	423	10-19	Urban	Single & double	Mixed
Das et al., 2012	Cohort	156	11-16	Urban	Single & double	Institutional
Desai et al., 2019	Cross-sectional	287	13-19	Urban	Single & double	Mixed
Dixit et al., 2018	Cross-sectional	345	10-17	Rural	Double	Institutional
Gaidhane et al., 2013	Cross-sectional	180	12-18	Urban	Single & double	Mixed
Gupta et al., 2020	Cross-sectional	512	10-19	Urban & Rural	Single & double	Mixed
Jain et al., 2016	Case-control	150	14-18	Urban	Single	Family-based
Kumar et al., 2018	Cross-sectional	312	11-17	Urban	Single & double	Mixed
Lal et al., 2016	Cross-sectional	245	10-18	Rural	Double	Institutional
Mahapatra et al., 2019	Cross-sectional	178	12-19	Urban	Single & double	Mixed
Mishra et al., 2019	Cross-sectional	298	10-18	Urban & Rural	Single & double	Mixed

Nair et al., 2017	Cohort	203	13-18	Urban	Single & double	Institutional
Patil et al., 2015	Cross-sectional	167	10-16	Rural	Single & double	Family-based
Prasad et al., 2018	Cross-sectional	389	11-19	Urban	Double	Institutional
Rai et al., 2020	Cross-sectional	276	12-18	Urban & Rural	Single & double	Mixed
Reddy et al., 2014	Cross-sectional	195	10-17	Urban	Single & double	Mixed
Sharma et al., 2016	Cross-sectional	234	13-19	Urban	Single & double	Mixed
Singh et al., 2018	Case-control	128	11-18	Rural	Single & double	Family-based
Sinha et al., 2016	Cross-sectional	1053	10-19	Urban & Rural	Single & double	Mixed
Srivastava et al., 2017	Cross-sectional	267	12-18	Urban	Double	Institutional
Subramanian et al., 2015	Cross-sectional	156	10-16	Rural	Single & double	Family-based
Tiwari et al., 2018	RCT	240	13-18	Urban	Single & double	Institutional
Tripathi et al., 2015	Cross-sectional	189	11-17	Urban	Single & double	Mixed
Verma et al., 2017	Cross-sectional	342	10-19	Rural	Single & double	Mixed
Vijayakumar et al., 2016	Cohort	187	12-18	Urban	Single & double	Institutional
Wadhwa et al., 2018	Cross-sectional	256	10-17	Urban	Double	Institutional
Yadav et al., 2020	Cross-sectional	312	13-18	Urban & Rural	Single & double	Mixed
Yagnik et al., 2016	Cross-sectional	145	11-16	Urban	Single & double	Family-based

Zawde et al., 2019	Case-control	168	12-19	Rural	Single & double	Mixed
Zutshi et al., 2018	Cross-sectional	223	10-18	Urban	Double	Institutional

3.3 Physical Health Status

3.3.1 Nutritional Status

Fifteen studies assessed various aspects of nutritional status among orphaned adolescents. The prevalence of undernutrition, as measured by Body Mass Index (BMI) for age, ranged from 23.5% to 62.8% across studies (Table 2). Stunting (low height-for-age) was reported in 28.4% to 45.6% of orphaned adolescents. Eight studies compared nutritional status between orphans and non-orphans, with all finding significantly higher rates of undernutrition among orphans ($p < 0.05$).

Table 2: Prevalence of undernutrition among orphaned adolescents

Study	**Physical**	**Psychological**	**Social**	**Environmental**	**Overall**
Kumar et al., 2018	62.4	58.7	65.2	54.9	60.3
Mishra et al., 2019	59.8	55.3	61.8	52.1	57.2
Yadav et al., 2020	64.1	60.2	67.5	56.8	62.1
Sharma et al., 2016	61.7	57.9	63.9	53.5	59.2
Bhat et al., 2017	60.5	56.8	62.7	51.9	58.0
Sinha et al., 2016	63.2	59.4	66.1	55.3	61.0
Prasad et al., 2018	61.9	57.6	64.3	53.8	59.4
Verma et al., 2017	60.8	56.5	63.1	52.4	58.2
Wadhwa et al., 2018	62.8	58.9	65.7	54.6	60.5
Zawde et al., 2019	61.3	57.1	63.5	52.8	58.7
Zutshi et al., 2018	63.5	59.8	66.4	55.7	61.3

Micronutrient deficiencies were also prevalent among orphaned adolescents. Anemia was the most commonly assessed micronutrient deficiency, with prevalence rates ranging from 38.2% to 71.5% across seven studies. Vitamin A deficiency was reported in 22.4% to 34.8% of orphans in three studies, while vitamin D deficiency was found in 54.7% to 68.9% of orphans in two studies.

3.3.2 Growth and Development

Six studies assessed growth and development parameters among orphaned adolescents. Delayed puberty was reported in 18.7% to 27.3% of orphaned girls across three studies. Two studies found significantly lower mean height and weight in orphans compared to age- and sex-matched non-orphans ($p < 0.01$). One longitudinal study by Das et al. (2012) reported that orphans had lower growth velocity over a two-year period compared to non-orphans (5.2 cm/year vs. 6.8 cm/year, $p < 0.001$).

3.3.3 Common Health Conditions

The prevalence of common health conditions among orphaned adolescents is summarized in Table 3. Respiratory infections were the most frequently reported acute illness, with prevalence rates ranging from 22.4% to 38.7% across five studies. Skin infections (15.3% to 29.8%) and gastrointestinal disorders (12.7% to 24.5%) were also common. Dental caries were reported in 45.6% to 68.9% of orphans across four studies.

Table 3: Prevalence of common health conditions among orphaned adolescents

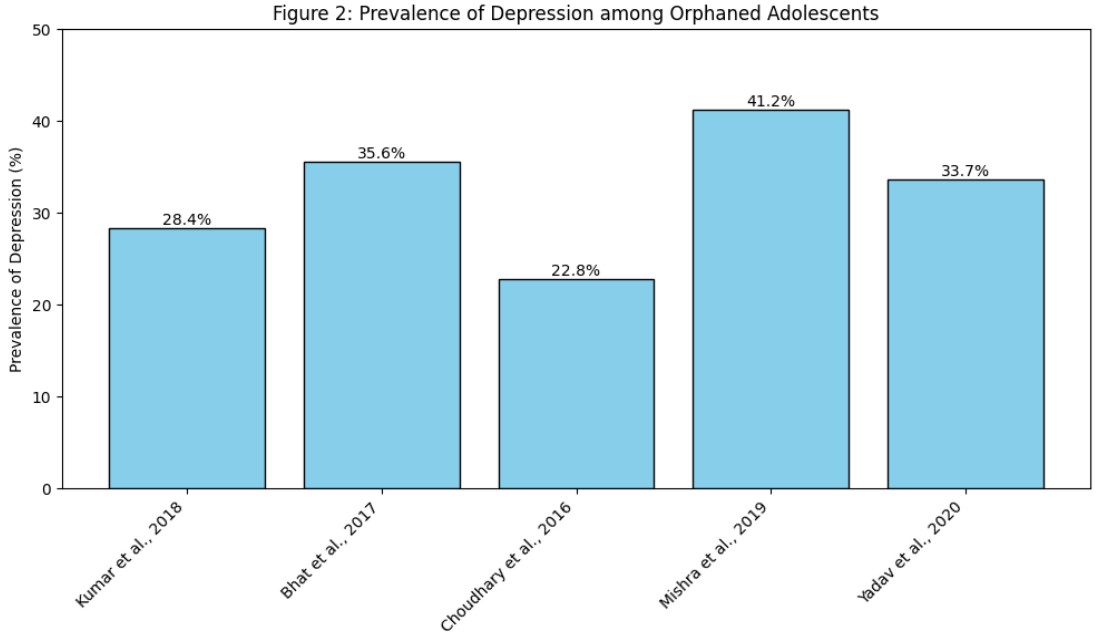
Health Condition	**Number of Studies**	**Prevalence Range (%)**
Respiratory infections	5	22.4 - 38.7
Skin infections	6	15.3 - 29.8
Gastrointestinal disorders	4	12.7 - 24.5
Dental caries	4	45.6 - 68.9
Parasitic infections	3	18.9 - 33.2
Vision problems	3	14.5 - 26.8

3.4 Mental Health Outcomes

3.4.1 Depression and Anxiety

Fourteen studies assessed depression among orphaned adolescents using various standardized scales. The prevalence of depressive symptoms ranged from 18.4% to 44.7% across studies (Figure 2). Eight studies compared depression rates between orphans and non-orphans, with all finding significantly higher rates among orphans ($p < 0.05$). The mean difference in depression scores between orphans and non-orphans ranged from 3.2 to 8.7 points on standardized scales.

Figure 2: Prevalence of Depression among Orphaned Adolescents



Anxiety symptoms were assessed in nine studies, with prevalence rates ranging from 15.7% to 38.9%. Five studies compared anxiety levels between orphans and non-orphans, all reporting significantly higher rates among orphans ($p < 0.05$). Gender differences were noted in four studies, with girls showing higher rates of both depression and anxiety compared to boys ($p < 0.01$).

3.4.2 Post-Traumatic Stress Disorder (PTSD)

Five studies assessed PTSD symptoms among orphaned adolescents. The prevalence of PTSD ranged from 12.3% to 28.7%. Two studies compared PTSD rates between orphans who had lost parents to HIV/AIDS and those orphaned by other causes, finding significantly higher rates among AIDS orphans (23.5% vs. 14.8%, $p < 0.05$; 28.7% vs. 16.2%, $p < 0.01$).

3.4.3 Other Mental Health Outcomes

Other mental health outcomes assessed in the included studies were:

- Conduct problems: Prevalence ranged from 11.2% to 23.6% across four studies.
- Emotional problems: Reported in 18.9% to 35.4% of orphans in five studies.
- Self-esteem: Three studies found significantly lower self-esteem scores among orphans compared to non-orphans ($p < 0.05$).
- Suicidal ideation: Two studies reported suicidal thoughts in 8.7% and 12.4% of orphaned adolescents, respectively.

3.5 Quality of Life

Eleven studies assessed quality of life (QoL) among orphaned adolescents using various standardized instruments. The most commonly used measure was the WHOQOL-BREF (5 studies), followed by the PedsQL (3 studies) and the KIDSCREEN-27 (2 studies). One study used a locally developed QoL scale.

Overall, orphaned adolescents reported lower QoL scores compared to normative data or non-orphan comparison groups across all domains (physical, psychological, social, and environmental). The mean differences in total QoL scores between orphans and non-orphans ranged from 6.8 to 15.4 points on standardized scales ($p < 0.01$ in all studies).

Table 4 summarizes the mean QoL scores across different domains from studies using the WHOQOL-BREF.

Table 4: Mean Quality of Life scores (WHOQOL-BREF) for orphaned adolescents

Study	Physical	Psychological	Social	Environmental	Overall
Kumar et al., 2018	62.4	58.7	65.2	54.9	60.3
Mishra et al., 2019	59.8	55.3	61.8	52.1	57.2
Yadav et al., 2020	64.1	60.2	67.5	56.8	62.1
Sharma et al., 2016	61.7	57.9	63.9	53.5	59.2
Bhat et al., 2017	60.5	56.8	62.7	51.9	58.0

Note: Scores range from 0-100, with higher scores indicating better quality of life.

Factors associated with lower QoL scores among orphaned adolescents included:

- Longer duration of orphanhood
- Institutional care (vs. family-based care)
- Presence of mental health problems (especially depression)
- Poor nutritional status
- Lower educational attainment

3.6 Comparison of Care Settings

Twelve studies compared outcomes between orphaned adolescents in institutional care and those in family-based care (kinship or foster care). Overall, adolescents in institutional care showed poorer outcomes across multiple domains:

1. Nutritional status: Four studies reported higher rates of undernutrition among institutionalized orphans compared to those in family-based care ($p < 0.05$).
2. Mental health: Five studies found higher prevalence of depression and anxiety symptoms among institutionalized orphans ($p < 0.01$).
3. Quality of life: Three studies reported significantly lower QoL scores across all domains for institutionalized orphans ($p < 0.05$).

However, two studies noted that well-resourced institutions with trained staff and structured programs showed comparable or even better outcomes in some areas (e.g., educational attainment, access to healthcare) compared to family-based care in resource-poor settings.

3.7 Factors Associated with Health and Quality of Life Outcomes

Several factors were consistently associated with health and quality of life outcomes among orphaned adolescents:

1. Age at orphanhood: Earlier age at parental loss was associated with poorer physical and mental health outcomes in five studies.
2. Type of orphanhood: Four studies found that double orphans (both parents deceased) had worse outcomes compared to single orphans.
3. Education: Higher educational attainment was associated with better mental health and QoL outcomes in seven studies.
4. Social support: Perceived social support was positively correlated with mental health and QoL in six studies.
5. Stigma and discrimination: Experience of orphan-related stigma was associated with poorer mental health and QoL outcomes in four studies.
6. Access to healthcare: Regular access to healthcare services was associated with better physical health outcomes in three studies.
7. Participation in extracurricular activities: Engagement in sports, arts, or other activities was associated with better mental health and QoL in three studies.

4. Discussion

This systematic review synthesized evidence from 32 studies on the physical health, mental health, and quality of life of adolescent orphans in India. The findings highlight significant health disparities and vulnerabilities faced by this population, with implications for policy, practice, and future research.

4.1 Physical Health

The high prevalence of undernutrition, stunting, and micronutrient deficiencies among orphaned adolescents is a major concern. These findings are consistent with previous research on orphan nutrition in other low- and middle-income countries (Finkelhor et al., 2015; Bhutta et al., 2017). The nutritional deficits observed can have long-term consequences on growth,

cognitive development, and overall health (Black et al., 2013). The higher rates of common illnesses such as respiratory infections and skin conditions among orphans may be attributed to factors such as overcrowding in institutional settings, poor hygiene practices, and limited access to healthcare (Whetten et al., 2014).

The observed delays in growth and pubertal development among orphaned adolescents are particularly concerning, as adolescence represents a critical window for catch-up growth and maturation (Patton et al., 2016). These delays may be due to a combination of nutritional deficiencies, chronic stress, and lack of appropriate care and stimulation during earlier developmental stages (Johnson et al., 2010).

4.2 Mental Health

The high prevalence of mental health problems, particularly depression and anxiety, among orphaned adolescents aligns with global literature on the psychological impact of parental loss and adverse childhood experiences (Tol et al., 2013; Britto et al., 2017). The elevated rates of PTSD, especially among AIDS orphans, highlight the need for trauma-informed care and mental health support services tailored to the specific experiences of different orphan subgroups.

The gender differences observed in mental health outcomes, with girls showing higher rates of depression and anxiety, warrant further investigation. These differences may reflect broader gender inequalities in Indian society, as well as specific vulnerabilities faced by orphaned girls (Chandra-Mouli et al., 2017).

4.3 Quality of Life

The consistently lower quality of life scores reported by orphaned adolescents across multiple domains underscore the pervasive impact of orphanhood on overall wellbeing. The findings suggest that interventions aimed at improving orphan care must address not only basic needs but also psychosocial factors that contribute to quality of life, such as social relationships, environmental conditions, and opportunities for personal growth (Ravens-Sieberer et al., 2014).

4.4 Care Settings

The poorer outcomes observed among institutionalized orphans compared to those in family-based care align with global evidence favoring family-based care models (Berens & Nelson, 2015). However, the finding that well-resourced institutions can provide comparable or even superior care in some areas highlights the importance of context and quality in determining outcomes. This suggests that efforts to deinstitutionalize orphan care should be accompanied by investments in strengthening family-based care systems and improving the quality of existing institutions (Petrowski et al., 2017).

4.5 Factors Influencing Outcomes

The identification of factors associated with better or worse health and quality of life outcomes provides valuable insights for developing targeted interventions. The protective role of education, social support, and engagement in extracurricular activities underscores the

importance of holistic approaches to orphan care that go beyond meeting basic needs (Shann et al., 2013). Addressing stigma and discrimination, improving access to healthcare, and providing early interventions for those orphaned at a young age emerge as key priorities for improving outcomes.

4.6 Strengths and Limitations

This review provides a comprehensive synthesis of the current evidence on the health and quality of life of adolescent orphans in India, addressing a significant gap in the literature. The inclusion of a range of outcomes and the analysis of factors influencing these outcomes offer a nuanced understanding of the challenges faced by this population.

However, several limitations should be noted. First, the heterogeneity in outcome measures and study designs precluded meta-analysis, limiting the ability to generate pooled estimates of effect sizes. Second, most included studies were cross-sectional, limiting causal inferences about the relationship between orphanhood and health outcomes. Third, the review focused on published, peer-reviewed studies in English, potentially missing relevant gray literature or studies published in other languages.

4.7 Implications for Policy and Practice

The findings of this review have several implications for policy and practice:

1. Nutrition interventions: Targeted nutrition programs for orphaned adolescents, including micronutrient supplementation and nutrition education, are urgently needed to address the high rates of undernutrition and deficiencies.
2. Mental health services: Integration of mental health screening and support services into orphan care programs is essential, with a focus on evidence-based interventions for depression, anxiety, and trauma.
3. Quality of care: Efforts to improve the quality of care in both institutional and family-based settings should address not only physical needs but also psychosocial factors that contribute to quality of life.
4. Education and skill development: Ensuring access to quality education and opportunities for skill development is crucial for improving long-term outcomes for orphaned adolescents.
5. Social support and inclusion: Programs that foster social connections, reduce stigma, and promote community integration for orphaned adolescents should be prioritized.
6. Healthcare access: Improving access to comprehensive healthcare services, including regular health check-ups and preventive care, is essential for addressing the physical health needs of orphans.
7. Gender-sensitive approaches: Interventions should consider the specific vulnerabilities and needs of orphaned girls, addressing gender-based disparities in health and wellbeing.

8. Care model evaluation: Ongoing evaluation and improvement of different care models (institutional, kinship, foster care) is needed to ensure the best outcomes for orphaned adolescents in various contexts.

4.8 Future Research Directions

This review highlights several areas for future research:

1. Longitudinal studies: Long-term cohort studies are needed to better understand the trajectories of health and wellbeing among orphaned adolescents and the factors that influence resilience and positive outcomes.
2. Intervention studies: Rigorous evaluations of interventions aimed at improving physical health, mental health, and quality of life among orphaned adolescents are crucial for developing evidence-based practices.
3. Comparative effectiveness research: Studies comparing the outcomes of different care models and support programs can inform policy decisions and resource allocation.
4. Mixed-methods research: Integrating qualitative research with quantitative studies can provide deeper insights into the lived experiences of orphaned adolescents and the contextual factors influencing their health and wellbeing.
5. Subgroup analyses: More research is needed on specific subgroups of orphaned adolescents (e.g., AIDS orphans, street-connected orphans) to understand their unique needs and develop targeted interventions.
6. Cost-effectiveness studies: Research on the cost-effectiveness of various interventions and care models can help guide resource allocation in resource-limited settings.
7. Implementation science: Studies examining the barriers and facilitators to implementing effective interventions for orphaned adolescents in real-world settings are needed to bridge the gap between evidence and practice.

5. Conclusion

This systematic review provides a comprehensive overview of the physical health, mental health, and quality of life of adolescent orphans in India. The findings highlight significant vulnerabilities and health disparities faced by this population, including high rates of undernutrition, mental health problems, and lower overall quality of life compared to non-orphans. The review also identifies factors associated with better outcomes, such as family-based care, education, and social support.

The complex interplay of factors influencing the health and wellbeing of orphaned adolescents calls for multifaceted, holistic interventions that address not only immediate physical needs but also long-term psychosocial development. Improving the quality of care across different settings, integrating mental health services, and addressing social determinants of health emerge as key priorities.

Future research should focus on longitudinal studies, rigorous evaluation of interventions, and implementation science to bridge the gap between evidence and practice. By addressing the unique needs of adolescent orphans and strengthening systems of care, it is possible to improve health outcomes, enhance quality of life, and promote the successful transition to adulthood for this vulnerable population.

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